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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,257	01/25/2005	Marco Winter	PD020065	5627

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EXAMINER

LODHI, ANDALIB FT

ART UNIT	PAPER NUMBER
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2109

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/522,257

Applicant(s)

WINTER ET AL.

Examiner

Andalib F. Lodhi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Specially, the beginning language 'The present invention relates to' is considered as implied.

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING (S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.

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- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

3. The drawings are objected to as failing to comply with labeling because they included in the following description not mentioned in the drawings. In the Brief Description of the Drawings 'Fig. 1a, 1b' or 'Fig. 4a, 4b' are listed, however, as each figure suppose to be separately numbered in the drawing and specification should show Fig.1: 1a and 1b, Fig.4: 4a and 4b.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 1, 2, 4, 5, 10 and 11 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the descriptor structure" in line 8 and "the relations" in line 9 and "the next upper hierarchical level" in line 12. There are insufficient antecedent basis for this limitation in the claims.

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Moreover, claim 1 lines 13 recites "a common format". It is unclear whether this is intended to be the same as or different from "common formats" recited in claim 1 line 5; however, appropriate correction is required.

Claim 2 and 5 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claims are narrative in form and replete with alternative structure. The structure, which goes to make up the system, must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative system.

Claim 4 lines 3 recites "the descriptor index". It is unclear whether this is intended to be the same as or different from "a descriptor index" recited in claim 4 lines 2; however, appropriate correction is required.

Claim 10 recites the limitation "Database model" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Moreover the claim is both a dependent and independent claim at once.

Claim Rejections - 35 USC § 103

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1-11, as well as we are understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Jahnke et al. in view of Dodds et al. (WO 01/42881).

Regarding claim 1, Jahnke et al. teaches:

A method for mapping a hierarchical data format with descriptors to a relational database management system, including the steps:

Separating the descriptors into portion ([0003], line 3), Storing the portions, Storing information describing the descriptor structure in the relations together with the portion of common formats in relations in the relational database (see e.g. Abstract, [0008])

However, Jahnke et al. does not teach that descriptor structure includes an indicator for the next upper hierarchical level of portion of a common format within the descriptors.

Dodds et al., however, in a descriptor structure includes an indicator for the next upper hierarchical level of portion of a common format within the descriptors, which facilitate a fast reconstruction of descriptor parts in Dodds et al. that shows the system and method for storing and indexing and retrieving XML document in relational database and re-construction of pertinent nodes and fragments in original document (see Abstract; and page 18 line 16-19)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Jahnke et al. system to include descriptor structure have an indicator for the next upper hierarchical level of portion of a common format within the descriptors, which facilitate a fast reconstruction of descriptor parts of Dodds et al. to improve the speed.

For claim 2, Jahnke et al. teaches:

The information describing the descriptor structure includes descriptor number for storing all types of descriptor formats (see e.g. [0012]).

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For claim 3, Jahnke et al. teaches:

Providing independent relations for the common formats (see e.g. [0003]).

For claim 4 Jahnke et al. does not teaches:

A method for storing a descriptor index in the relational database, which is allowing to store additional information for every descriptor.

Dodds et al., however, further in a method for the step of storing a descriptor index in the relational database, which allowing to store additional information for every descriptor in Dodds et al. that shows the factorization system (see page 9 line 14-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Jahnke et al., as modified above, to include a method for the step of storing a descriptor index in the relational database, which is allowing to store additional information for every descriptor as further in Dodds et al. to generate faster queries and to save indexing and database space.

For claim 5 Jahnke et al. does not teaches:

The descriptor index comprises descriptor numbers, absolute positions of the descriptors within the relations and/or unique identifiers for the descriptors.

Dodds et al., however, further teaches the descriptor index comprises descriptor numbers, absolute positions of the descriptors within the relations and/or unique identifiers for the descriptors in Dodds et al. that shows how to do encodings in accordance with the invention are created based on the structure of the document (see e.g. page 4 line 19-27 and page 5 line 1-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Jahnke et al., as modified above, to include the descriptor index comprises descriptor numbers, absolute positions of the descriptors within the relations and/or unique identifiers for the descriptors as further in Dodds et al. to preserve the hierarchy of the document.

For claim 6, Jahnke et al. teaches:

Hierarchical data format comprising descriptors corresponds to the Extensible Markup Language (see e.g. [0020]),

For claim 7, Jahnke et al. teaches:

Common format comprise at least elements, attributes and text (see e.g. Abstract, [0008] and [0034])

For claim 8, Jahnke et al. does not teaches:

Common format text is divided into string values and integer values.

Dodds et al., however, teaches common format text that is divided into string values and integer values in Dodds et al. that permits the user to enter a text string type

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relational database query and processes query by communicating a query to the relational database and sends the result of the query (see page 7 line 25 and page 8 line 1-6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Jahnke et al. with a system common format text divided into string values and integer values, as shown by Dodds et al. to provide easy access for viewing and printing the query results for the users.

For claim 9, Jahnke et al. does not teach:

The common formats comprise namespace information.

Dodds et al., however, teaches in the common formats that comprise namespace information, in Dodds et al. that shows the XMLName values may be divided into Namespaces and to bring the namespaces relevant document part by part instead of the whole name table into the memory (See page 17 lines 9-14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Jahnke et al. system the common formats comprise namespace information by using a method, as further in Dodds et al. that to keep the length of names short, and to reduce the memory space for the database.

For claim 10, Jahnke et al. does not teaches:

Database model for mapping a hierarchical data format comprising descriptors to a relational database management system, by using a method.

Dodds et al., however, further in the database model for mapping a hierarchical data format comprising descriptors to a relational database management system, by using a method in Dodds et al. that shows a system and method for storing, indexing, retrieving, searching and generating XML documents in a relational database is provided in accordance with the invention uses any relational database management system to store the XML documents s so that the system and method are not dependent on any particular relational database implementation (see e.g. Page 2 line 21-24, Page 3 line 1-3 and line 9-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Jahnke et al., as modified above, to include the database model for mapping a hierarchical data format comprising descriptors to a relational database management system, as further in Dodds et al. to capture and reproduce the structure not only fragments but also the whole document as well.

Regarding claim 11, it appears the apparatus of the system of Jahnke et al. implements the method of claim 1 meets the apparatus of claim 11.

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5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
6. Bray T et al. ("Namespaces in XML" W3C TECHNICAL REPORT, 14 January 1999 (1999-01-14), XP002233036) teaches a simple method for qualifying element and attribute names used in Extensible Markup Language documents.
7. Florescu D et al. ("A Performance Evaluation of Alternative Mapping Schemes for Storing XML Data in a Relational Database" INRIA TECHNICAL REPORT NUMBER 3680, May 1999 (1999-05), XP 002168318) shows how XML data can be stores and queried using a standard relational database system.

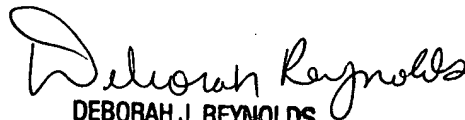
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andalib F. Lodhi whose telephone number is (571) 270-1759. The examiner can normally be reached on Monday-Friday, 7:30am- 5:00pm, EST Alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on (571) 272 4919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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